09/05 EINS 512426



GC 3 (THREE OVEN)

Installation Instructions

PLEASE READ THESE INSTRUCTIONS BEFORE USING THIS APPLIANCE

INSTALLER: LEAVE THESE INSTRUCTIONS WITH THE APPLIANCE. CUSTOMER: KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.



FOR USE IN USA/CANADA

CONTENTS

SECTION INSTALLATION BASE OR HEARTH OPEN FLUE RANGE - MODEL GC3 (THREE OVEN) VENT CONNECTION WALL TILING GAS SUPPLY - U.S. PIPE THREADS APPLIANCE DIMENSIONS LOCATION OF NAME PLATE INITIAL LIGHTING OF RANGE REPLACEMENT PARTS BAKING OVEN BAFFLE PLATE TECHNICAL SPECIFICATION INSTALLER SERVICING INSTRUCTIONS - GC3 (THREE OVEN) YEARLY SERVICE

INSTALLATION

NOTE: THESE INSTRUCTIONS SHOULD BE LEFT WITH THE APPLIANCE AND THE USER TO RETAIN FOR FUTURE REFERENCE.

Aga Gas Fired ranges are delivered unassembled.

Before installation can be made the site is inspected for suitability by an Authorised Aga Distributor and corrected where necessary to conform with local installation codes or in the absence of local codes with:

In Canada:

The CAN/CGA-B149 installation codes.

In U.S.:

The National Fuel Gas Code NASI Z223. 1-latest edition.

Assembly is undertaken on site by the same Aga Distributor to ensure correct performance and safety.

BASE OR HEARTH

It is essential that the base or hearth on which the range stands should be level and strong enough to support the total weight of the range.

Approximate weight:- 3-Oven

Model GC3 (Open Flue) - 477 kg (1049 lb)

The top face of the hearth must be of non-combustible material for a minimum thickness of 12mm (1/2in) and comply with current Building Regulations and National Fire Laws.

OPEN FLUE RANGE - MODEL GC3 (THREE OVEN)

The wall behind the cooker draft hood and flue connector must have a minimum air gap of 57mm (2 1/4"). Any openings in the wall behind the range or in the floor under the range must be sealed before appliance installation.

Ensure the draft hood is securely bolted to the support spigot as shown in Fig. 2.

NOTE: THIS IS NORMALLY FITTED AND SECURED BY THE FACTORY BEFORE DESPATCH.

The wall behind the range must be the outside wall for the venting of flue products.

Recommended amount of make-up air into the room = 170ft3/hr

Installation Clearances of Combustible Cabinets Adjacent to Range



Fig 1. Open Flue Model GC3 DESN 512843



Fig 2. Section Through Downdraught Diverter A

VENT CONNECTION

A 100mm (4in) Type B Gas Vent must be used and fastened by screw to the draft hood flue collar.

U.S.

The gas vent must be connected to a chimney or independently and in accordance with Chapter 26, chimney, Gas Vent and Fireplace Systems of the current issue of Equipment and Volume of the ASHRAE Handbook. The gas vent proximity to combustible materials must be installed as recommended in ANSI/NFPA 211 and according to manufacturers instructions. Chimneys and vents shall terminate above roof level and in accordance with the requirements of the current issue of ANSI/NFPA 211 (see diagrams) and be at least 1.53m (5ft) above the flue collar of the draft hood outlet.

Part 7, Venting Equipment, outlined in the current National Gas Code NASI Z223, outlined in the current guidelines on all these aspects.

Canada:

The gas vent must be connected to a chimney or independently and in accordance with the CAN/CGA - B149 installation codes.

The air gap between vent and combustible materials must be given for the following types of vent:

(i) Type B Vent - 25mm (1in) minimum.

(ii) Single wall vent connector - 150mm (6in) minimum.

Listed connectors passing through the combustible walls and partitions must be guarded by a ventilated metal thimble not less than 200mm (8in) diameter.

Chimneys and vents shall terminate above roof level and in accordance with the requirement of the current issue of the CAN/CGA - B149 Installation Code (Code W) (see diagrams) and be at least 1.53m (5ft) above the flue collar of the draft outlet.

1. If suitable lined brick chimney is used it must be swept before connection and not less than 150mm (6in) internal diameter.

2. The top of the chimney should be fitted with an approved Terminal.

3. The flue route to the chimney should be as direct as possible. Resistance in the form of directional change should be kept to a minimum. Right angle bends and horizontal runs should be avoided.

4. The chimney terminal should terminate at the highest possible point, preferably in a freely exposed position. Termination at the roofs eaves is unacceptable.

5. The Aga Distributor or Local Gas Company should be advised where any doubt as to the suitability of the flue.

6. Approved factory made chimneys are acceptable with the appliance and should not be less than (4in) internal diameter.

7. In the event of an extractor fan being fitted in the vicinity of the range, compensatory ventilation will be required to satisfy the demands of the fan without influencing combustion efficiency or chimney flue condition.



Fig 3.

WALL TILING

If the cooker is to stand in a recess or against a wall which is to be tiled in no circumstances should the tiles overlap the range top plate.

GAS SUPPLY - U.S. PIPE THREADS

NOTE: A GAS CONTROL VALVE MUST BE INSTALLED IN THE GAS PIPELINE EXTERNALLY OF THE RANGE (NOT SUPPLIED).

9.5mm (3/8in) N.P.T. Male connection near the front of the range on the LH or RH side. (Optional).

ALL GAS CONTROLS MUST BE U.S. PIPE THREADS.

Maximum Heat Input: 4.4kW (15,000 Btu/h).

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psig (3.5kPa). The appliance must be isolated from the gas supply piping system by closing the individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa).

APPLIANCE DIMENSIONS



NOTE: DIMENSIONS MAY ALTER SLIGHTLY ON ASSEMBLY

Fig. 4 - Model GC3 Open Flue DESN 512430

LOCATION OF NAME PLATE

The model and serial numbers for this appliance are found on the data plate. These numbers must be used when requesting advice from your Aga Distributor. The name plate is located on the burner housing panel behind top left door. The maximum gas inlet pressure at the appliance must not exceed 12 inches w.g. (2.98kPa) for Natural Gas and 14 inches w.g. (3.48kPa) for L.P. Gas. The minimum gas inlet pressure at the appliance must be 4 inches w.g. (1kPa) Natural Gas and 10 inches w.g. (2.248kPa) L. P. Gas to enable the correct manifold pressure to be obtained.

INITIAL LIGHTING OF RANGE

In a cold range, difficulty may be experienced in maintaining the main burner alight on **initial light-up** only. Should this occur, set

the control knob to the \checkmark position. Depress knob and light pilot. With the pilot flame established, rotate the gas valve control knob **2** anti-clockwise to its low fire position where upon the main burner will automatically light. Leave in the low fire position for at least 30 minutes. After 30 minutes rotate the control knob further anti-clockwise to the mid position in the green band for normal running.

(See <u>Fig. 8</u>).

REPLACEMENT PARTS

In the event of component failure, which requires replacement, contact your local Aga Distributor who will advise and supply the necessary replacement.

Expendable components that will require replacing at some time or other are listed as follows:

Description

- 1. Pilot Thermocouple
- 2. Main Burner
- 3a. Pilot Burner Assembly N.G.
- 3b. Pilot Burner Assembly L.P.G.
- 4. Combination Gas Valve
- 5a. Pressure Regulator N.G.
- 5b. Pressure Regulator L.P.G.
- 6. Combustion Chamber Door Seal

BAKING OVEN BAFFLE PLATE

A metal plate (with square holes), which is provided in the Aga pack, **MUST** be positioned on the top runners of the Baking Oven. Slide the plate in fully, until it makes contact with the back of the oven. This baffle is a permanent part of the baking oven, to regulate the oven temperature.

TECHNICAL SPECIFICATION

Model	GC 3 (Three Oven) - Open Vent	
Gas Type	Natural Gas	L.P.G.
Main Burner Injector	CAT82/400	CAT92/170
Pilot Burner Injector	4212	4209
Combination Gas Valve Bypass Screw	1.00mm or 1.20mm	0.60mm or 0.80mm
Gas Burner Pressure	4.0 inch w.g.	10.0 inch w.g.
Combination Gas Valve	S.I.T. EUROSIT	
Pilot Assembly	MACLAREN PRODUCTS	



Fig. 5 DESN 512439



Fig. 6 Aga Gas Cooker - All Models DESN 510818



Fig. 7 DESN 512440



Fig. 8 DESN 512431

INSTALLER SERVICING INSTRUCTIONS - GC3 (THREE OVEN)

It is recommended that the range be serviced at regular annual intervals.

Arrange with the householder that the range has been turned OFF the night before to ensure it is cold upon arrival.

YEARLY SERVICE

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psig (3.5kPa). This appliance must be isolated from the gas supply piping system by closing its manual shut-off valve during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 psig (3.5kPa).

1. Isolate the gas supply by turning off the service gas valve beneath the combination gas valve. Break the hexagon union connection nut. (See Fig. 7).

 Detach inner burner fixing screws (See Fig. 7) and draw complete gas burner assembly clear of the combustion chamber resting it on the floor in front of the range.
NOTE: THERE IS SUFFICIENT LENGTH OF THERMOSTAT CAPILLARY TUBE WITHOUT DETACHING THE SENSING END FROM THE TOP OF THE ROASTING OVEN.

3. Remove the boiling plate, combustion chamber baffle and simmering plate.

4. Check conditions of flueways and combustion chamber and clean if necessary.

5. Lightly brush the perforated top of the gas burner and check that the burner venturi is free of lint and fluff. **NOTE:** IT MAY BE NECESSARY TO DETACH THE PILOT ASSEMBLY AND REMOVE THE BURNER TO ENSURE IT IS FREE.

6. Check the condition of the pilot thermocouple tip to ensure it is clean and free of carbon. Heavy heat oxidised tips should mean the removal of the thermocouple and a new replacement. Examine and brush clean the pilot light parts and examine the ignitor cable and connector strip to ensure the PTFE insulation cable, remains intact and strip is firmly connected to the spark electrode. Clean any carbon away from the electrode.

7. Refit combustion burner chamber baffle.

8. Refit gas burner assembly in reverse manner described in 2 and reconnect gas supply at service gas valve union. On completion test the gas installation for soundness and purge. Leak testing of the appliance shall be conducted according to manufacturers instructions. NOTE: USE SOAPY WATER SOLUTION ON NEW GAS CONNECTIONS TO ENSURE THERE ARE NO GAS LEAKS.

9. Turn on the gas supply and follow the procedure for lighting the burner.

10. Ensure that the pilot and main burner flames are burning evenly, the thermocouple is enveloped by the pilot flame.

11. Visually check main burner and pilot flame for correct flame pattern. An established main burner at high fire will be predominantly blue with yellow tippings on an even height flame strip and be about 150mm (6in) high. See <u>Fig. 6</u>. Ensure all flameports have cross-lit and that the pilot light flame is free from sooting.

12. The maximum depth of any cabinets installed above the top cooking surface of the range must not exceed 330mm (13in).

For further advice or information contact your local distributor/stockist





With Aga's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliance described and illustrated at any time.



110 Woodcrest Road Cherry Hill NJ 08003 800.633.9200

www.aga-ranges.com